











# SPAWAR Single Training Integrator SPAWAR Discussions

February 2012

**LPAC** 

4.0, Space and Naval Warfare Systems Command

"Provide our Sailors confidence in their equipment and in their own skills."
- CNO's Sailing Direction

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- **▼** Background
- **▼** Status
- **▼** Initial thoughts and feedback
- ▼ Way ahead



- ▼ Fact: Information Dominance training must improve; Flag feedback continues to call out insufficient Cyber/C4ISR training
- ▼ Fact: Systems are more interdependent/integrated now more than ever; require holistic approach (CNO LTR of 8 SEP 2011)
- ▼ Fact: Resources will tighten over the FYDP; especially for training .... Not all validated training requirements will be funded
- ▼ Fact: Single system based training solutions are untenable to Fleet
- ▼ Fact: N2/N6 RO's shoulder training costs too long; transition must occur sooner in program life cycle
- ▼ Fact: Air, Sub, Surface enterprises have successfully implemented STI and are receiving benefit

"The intent is to have clear and unambiguous accountability for the effectiveness of Sailor technical training for the life of a system ('cradle to grave').", ADM Harvey commenting in his BLOG on the stand up of PMS 339 Surface STI.



# **Key Indicators for Change**

- ▼ RDML Guadagnini (CSG-9) email to PEO C4I (Sent: Fri Aug 06 01:22:01 2010): "The systems are getting so complicated, and the interfaces so intricate and fragile, that it is outpacing the training of our technicians and operators. The young Sailors are arriving without the experience and the mental tools (they are smart, just insufficiently trained) to operate and repair things like GCCS-M, ADSI, ISNS, and CVTSC. Additionally, many of the "returning letterman", i.e., journeyman-level Sailors ordered back to sea don't have the experience-based nor training-based NEC to be able to operate and repair the systems."
- ▼ CSG-1 MSG to Fleet Leadership (021422Z AUG 11): "IN THESE SITUATIONS, WE ARE PLACING THE TASK OF COMPUTER NETWORK DEFENSE AND NETWORK SECURITY SOLELY ON OUR UNIT ITS, OFTEN NOT PROVIDING ADEQUATE TRAINING AND THE TOOLS TO MAINTAIN A HIGH STATE OF IA/CND READINESS TO INCLUDE THE ABILITY TO CONDUCT UNIT CND READINESS SELF-ASSESSMENTS."
- ▼ USS Abraham Lincoln MSG to Fleet Leadership (040307Z AUG 11): "INFORMATION ASSURANCE PERSONNEL ARRIVING TO THE FLEET ARE INADEQUATELY TRAINED TO EFFECTIVELY PERFORM THEIR DUTIES. SPECIFICALLY, THOSE SAILORS WITH 2779 AND 2780 NECS."
- ▼ CO USS Lake Erie to RDML Herbert: "My principle concerns...center on fleet software applications particularly when relative to training provided at the shipboard level. I must assume the applications are necessary; but the training provided ...do not support a definitive assessment. ... my experience has been that getting/keeping the applications performing as intended takes not only significant efforts from my sailors, but dedicated support/technical assistance from NAVYCYBERFOR, SPAWAR, and the RMC. My assessment is the training provided to my team and the support infrastructure lags behind the necessarily aggressive cyber-security doctrine development and policy implementation."



#### **OPNAV NOTICE 5400**

ESTABLISHMENT OF THE NAVAL SEA SYSTEMS COMMAND PROGRAM MANAGER OFFICE FOR SURFACE TRAINING SYSTEMS

The establishment of PMS 339 supports the goals outlined in the Surface Warfare Training Strategy through validation of NAVSEA program management decisions supporting execution of the OPNAV specified training requirements. This functions is conducted....with the objective of improving and sustaining efficiencies and effectiveness across all phases of surface training. This effort follows the best practices of established warfare community training program managers.

\* PMS 400/SEA 21 interest in divesting themselves from MPT business \*N86 prioritization NAVAIRINST 5400.111B

DESIGNATION OF THE AVIATION TRAINING SYSTEMS PROGRAM MANAGER AIR (PMA 205)

PMA 205 is responsible for providing life-cycle management of all general naval aviation training systems...PMA 205 serves as the single point of contact with OPNAV for the Navy's long range strategic planning, acquisition, policy, future research and development activities, and technology insertion into existing and future naval aviation training systems. The training system includes all necessary elements of logistics support. PMA 205 will work with CNO, Naval Aviation PEOs, and all elements of NAVAIRSYSCOM for a coordinated effort to integrate planning, programming, budgeting, and acquisition of aviation training systems.

\*APM-T Model



- Nov '10: SPAWAR 4.3 was designated Training Support Agent for IT Continuum courses with multi-program equity
- ▼ Feb'11: OPNAV N2/6 requested SPAWAR 4.3 provide POM 13 submission for Single Training Integrator
- ▼ Feb '11: OPNAV N2/6B, Mr. Weddel, accelerated visibility and incorporation of the Training Integrator concept and planning for phased implementation sooner communicated with SPAWAR/PEO
- ▼ Feb '11: 4.0 briefed RDML Burroughs & RADM Brady on OPNAV intentions and SPAWAR implementation concepts
- ▼ Apr '11: OPNAV N2/6C and 4.3.4 briefed RDML Simpson on status of implementation plan
- ▼ Jun '11: N2N6 Pilot data call to two PMWs for capture of training costs
- ▼ Sep '11: POM 14 Submission and continuing dialog with OPNAV N2N6
- ▼ Jan '12: 4.0 Direction to continue development of implementation plan



# SPAWAR STI – Fundamental Purpose

## ▼ Increase Information Dominance training effectiveness

Centralize accountability (TSA) for training metrics

# ▼ Improve training transition and TSA – TA coordination

- Increase planning and coordination for handoff
- Collaborate on resourcing plans (POM) to facilitate timely transition
- Deliver NETC compliant solutions; simple transfers

#### **▼** Drive efficiencies

- Remove redundancies
- Integrate solutions across programs (systems)
- Leverage TTE/Simulation investment across programs
- Leverage technical/training content for performance support



# Way Ahead slide from OCT 11

- **▼** SPAWAR 4.0 collaborate with PEO's to operationalize concept
  - Determine how programs will transition to STI; develop plan and schedule
  - Negotiate process seams and resource planning requirements
  - Develop an implementation plan with milestones
  - Develop a program transition plan/schedule
  - Develop draft implementation instruction and charter
- ▼ OPNAV N2/N6 gain concurrence on STI concept within 'F' and 'C'; get resource officers onboard
  - Champion successful POM14 issue through end-game for SSTI
  - Staff and release SSTI implementation instruction and include functions appropriately in the IDTEC
  - Help identify and secure seed funding in FY12-13 for STI implementation planning and preparation (tools and processes)
  - Facilitate discussions with RO's and PM's to plan cutover to SSTI

End State: Implement SSTI under FRD by 1 October 2013.



# **Latest SSTI Programming Options**

- **▼** SPAWAR/PEO partner to conduct a phased implementation in execution year
  - No reprogramming or POM activities
  - Coalition of the willing approach; programs that want to divest MPT requirements have the opportunity
  - Does not consolidate responsibility; very similar to current construct if you consider 4.3.4/TDSC as a preliminary SSTI
- ▼ OPNAV standup of SSTI with dedicated Information Dominance Training PE
  - No new money; existing program funds (and requirements) transfer to SSTI
  - Consolidated, prioritized POM position for ID Training
  - SSTI Project Manager ADDU to POR PM for MPT Deliverables (schedule/performance)
  - Only pure play option to drive effectiveness, transition and efficiency



# SSTI: Why now and why SPAWAR 4.3.4?

- Navy C5I infrastructure, services and applications ashore and afloat are becoming more integrated as technology trends towards enterprise services, cloud computing and virtualization
- ▼ Current and future architectures invoke greater interdependencies of training solutions due to SoS, FoS, system consolidation and SOA constructs
- ▼ Training solution coordination and integration must represent Fleet readiness and performance objectives and be executed outside of individual program lanes
- ▼ SPAWAR 4.3.4 has been evolving to a STI role/responsibility through the following steps:
  - Initial focus on issuance of policy/guidance and oversight; executing as MPT Technical Area Expert
  - Establishment of MPT National Competency Lead under 4.0; aligning with SSC L/P 4.3.1 organizations; initiating SPAWAR MPT Community of Practice
  - Acting as the IT Continuum Coordinating Training Support Agent; TSA for all courses with multi-program equity



# APML Feedback / Initial Thoughts



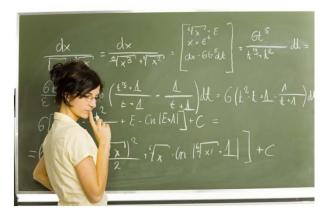




ME











# ▼ There is no dry ink....

- Need APML collaboration and partnership to be successful in the design and implementation
- Need to identify what is in the realm of the possible for a phased implementation; follow on working sessions to outline a proposal on the way forward

#### Short Term Goals

- Present CAPT Semmler and Mr. Brown a phased implementation plan by 20 April
- If we can agree on an operational construct.....
  - What are a group of pilot programs (early adopters)?
  - Attempt a coordinated POM submission for '15 (consolidated would be even better)





# **▼** SPAWAR Training Systems Integrator, as single POC for all SPAWAR N2/N6 systems training solutions will:

- Improve training to be more timely and relevant; increasing individual performance and readiness
- Eliminate/minimize warfighter training gaps
- Capitalize on training efficiencies
- Oversee training solution planning, development, implementation, transition, assessment and sunset
- Coordinate training programming with PM's, RO's, OPNAV N2/6C/F, OPNAV N1, NCF and NETC
- Provide C5I training efficiencies and consistency across SYSCOM's and PEO's in coordination with PMS 339 and PMA 205



# C4ISR/Cyber C4I Training Support Agent

- SPAWAR C4I POC for OPNAV, NETC and Learning Centers.
- Policy and process definition for training analysis, design, development, implementation and assessment.
  - Standardized tools/repositories for analysis and development work products (Front End Analysis (FEA), Job Task Analysis (JTA), Training Requirements Planning Process Methodology (TRPPM), Navy Training Systems Plan (NTSP))
  - Standardized metrics for tracking training readiness for transition to NETC Learning Centers and installation approvals at Navy C5I Modernization Conferences and Systems Engineering Technical Reviews for Manpower, Personnel, and Training (MPT) compliance.
- C4ISR/Cyber NTSP Program Manager
- Manages training funding across programs; new systems, sustainment,
   Technical Training Equipment, Training Devices, Mobile Training Teams, and performance support tools/job aids

Mirrors Resource Sponsor/SYSCOM construct for NAE, SWE & USE



# **5 SSTI Differentiators From Status Quo**

- Centralized development and execution of consolidated ID systems training Program Element
  - Allows stakeholders to prioritize requirements and align solutions to avoid/fix performance issues in critical readiness areas
  - 'matrix fest' like environment where stakeholders leave the room with the plan
- 2. Centralized planning, design, implementation, sustainment and sun-setting
  - Services architectures and Interdependent systems require integrated training solutions; huge efficiency driver through leveraged investments
  - Simply not possible with program independent MPT solutions
- 3. Single point of accountability for training effectiveness IDC readiness focused
  - Supported by a metrics framework that is reported to stakeholders on regular basis; continuously mitigate risk
- 4. Common processes and tools used by MPT professionals leads to compliant, timely and transition-ready solutions
  - Drives effectiveness and efficiency
- 5. Convergence of technical documentation and learning content/performance support
  - Fielding of an Integrated Performance Support System within SAILOR 2.X
  - Delivery and maintenance of an ID Systems Operational Sequencing System



# SSTI – Only 70% Of Required Funding?

- ▼ SSTI is designed to maximize ID system training investment across entire portfolio
  - Consolidated planning, design, implementation, sustainment and sun-setting is the only chance to stretch further reduced funds
  - Not all training requirements get funded; stakeholders assume risk as a team and work to mitigate impact
  - Critical systems funded to deliver effective training far outweighs all systems with partially funded, ineffective training solutions
- ▼ Status quo training solutions development will be devastated with further funding reductions
  - PM's already squeeze MPT requirements; budgeted vs. executed would continue to trend downward



### **SSTI Justification Points**

- ▼ SPAWAR knows SSTI will improve effectiveness and compliance of training solutions
- ▼ SPAWAR believes SSTI concept will save time and money when fully implemented
  - How much is TBD; need to perform and analyze
- ▼ How: Centrally planned, programmed and executed holistic training approach for Information Dominance systems will deliver increased ID warfare readiness
  - Prioritized NTSP's across the ID warfare capabilities
    - Funding and level of effort for MPT solutions in sync with prioritized requirements
  - Consistent process and tools executed by MPT professionals drives the efficiency and increased effectiveness; timely and compliant solutions that will transition to TA as planned
- **▼** Examples of MPT planning product/process gaps:
  - No FEA, JDTA and/or TRPPM (NTCSS, legacy Comms)
  - Systems fielded ahead of approved and funded NTSP (AIS, HBSS, NIAPS)
  - Programming not sufficient to support training solutions and transition (SAGA, JCC, Shore)
- ▼ Effects of current way of doing business
  - Ineffective/insufficient training solutions for ID warfare systems
  - Delayed training solutions to the Fleet
  - Increased/duplicative costs for solutions

<sup>\*\*</sup>STI is designed to mitigate risk of under funded MPT solutions across ID programs



# Case Study: ITC – 2791 Course Planning and Design

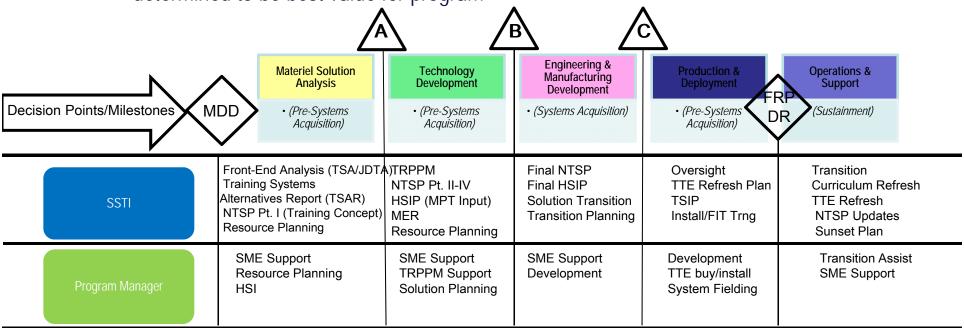
- ▼ Initially last five weeks of 2791 (18 weeks) IT SysAd C School was being filled with CNN/CANES
  - New accessions were the wrong target audience
  - PMW only requires 300 per year throughput where 2791 was designed for 900
- **▼** SPAWAR intervention led to SAGA as last five weeks
  - Analyzed the requirement alongside NCF to determine 2791 audience needed an overview of the Navy Network Environment (focus on afloat) and skills to conduct fundamental sysad tasks; build on certification training with GOTS configurations
  - Innovative TTE/SIM blend designed and approved
    - 43% less expensive than full TTE buy and install for three training sites
  - Saves days/weeks of training of fundamentals in systems specific F/C schools
- ▼ Coordinating TSA function to work across programs tested with favorable results programmatically; value for SSTI is evident



- ▼ Options still on the table...
  - Fund through PPBE process to dedicated SPAWAR PE
  - Fund through execution year allocation to dedicated SPAWAR PE
- ▼ This will reduce program dollars but will also remove an equal amount of MPT deliverable requirements and responsibility; this is not a tax
- ▼ PM's still POM for development and procurement of TTE as determined in the SSTI generated plan (NTSP) and solution design



- ▼ Focus on development through approval of all pre-milestone C MPT deliverables; then implementation and sustainment post MS C
  - FEA, ME, TSAR, TRPPM, NTSP part I-IV, and TTE/SIM management (lifecycle)
- ▼ Post milestone C focus is on oversight to ensure quality assurance and compliance (NTSP and TA transition)
  - Program will POM and fund training solution development and TTE/SIM buy and install
  - Solution development could be executed by SSTI (Ech III execution element) if determined to be best value for program





# What Changes Under SSTI?

#### **Today**

- Distributed accountability
- Individual program planning; many POM submissions for training
- Single system (program) training approach
- Varied MPT product development styles and techniques
- ▼ Individual programs execute TSA TA coordination
- No standardized TSA and training effectiveness metrics
- Programs manage fleet training feedback
- ▼ Leadership interacts with 140+ programs in PEO C4I/EIS

#### **SSTI**

- ▼ Consolidated accountability
- Single POC for planning/programming; single coordinated POM submission
- ▼ Holistic training approach for ID programs aligned to Fleet jobs and POM
- ▼ Standard processes (with tools) executed by MPT competency (professionals)
- ▼ SSTI executes TSA functions for ID programs
- SSTI implements metrics framework for TSA and training effectiveness
- ▼ SSTI is single POC for fleet training support and response
- ▼ Leadership has single POC for all SPAWAR program MPT status/issues